REMARKS

Claims 1, 6-16, and 18-23 currently appear in this application. The Office Action of January 14, 2005, has been carefully studied. These claims define novel and unobvious subject matter under Sections 102 and 103 of 35 U.S.C., and therefore should be allowed. Applicants respectfully request favorable reconsideration, entry of the present amendment, and formal allowance of the claims.

Interview

Applicant's attorney wishes to thank Examiner Hendricks for the courtesies extended during the telephone interview of June 6, 2005. During this interview the 112 rejections were discussed, and it was noted that reciting steps for removing the ions responsible for tartaric instability in the alternative was supported by the specification. Applicant agreed to elaborate on why the nanofiltration step was critical.

Rejections under 35 U.S.C. 112

Claims 4 and 5 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.

This rejection is respectfully traversed. Claim 1 has been amended to recite that the ion exchange resin is either anionic or nonionic or that the permeate is treated by electrodialysis.

Claim 20 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement.

This rejection is respectfully traversed. Claim 18, from which claim 20 depends, has been amended to recite anionic or cationic exchange resins in the alternative.

Claim 18 is rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure that is not enabling.

This rejection is respectfully traversed. Claim 18 has been amended to recite that the ion exchange is cationic exchange or anionic exchange.

Art Rejections

Claims 1, 3-7 and 18-20 are rejected under 35 U.S.C. 103(a) a being unpatentable over Smith in view of applicants' admissions and further in view of Brown et al.

This rejection is respectfully traversed. As indicated in the IDS filed April 16, 2001, in the oenological field, substituting a reverse osmosis membrane with a nanofiltration is used solely to reduce the operating pressure on the wine during a filtration treatment to produce a retentate and a permeate. That is, Tudhope (USSN 10/257,676, cited previously, discloses substituting a reverse osmosis membrane with nanofiltration solely to reduce the operating pressure on the wine.

In contrast to what the Examiner asserts is applicant's admission, the present invention removed from wine only the ionic substances which are responsible for the tartaric instability, namely, tartrates, bitartrates and potassium ions, and not any undesirable substance in general, leaving in the wine as much as possible all of the substances which provide the desirable characteristics of that particular wine. The present invention uses a particular nanofiltration membrane to make it possible to remove from the permeate most of the substances which cause tartaric instability, and as

little as possible of the substances which impart the desirable characteristics to the wine.

A generic osmosis membrane does not remove the ions responsible for tartaric instability (*i.e.*, tartrates, bitartrates and potassium ions), as it retains them in the retentate, making useless the subsequent action of the ionic exchange resins, anionic and cationic, on the permeate. As a consequence, the method of Smith, associated with generic ionic exchange resins (anionic and cationic) is absolutely ineffective for tartaric stabilization of wine.

In the oenological field (see Amati, Ferrarini et Barbieri, "Autoarricchimento dei nosti con membrane permeo-sellettiv", Self-enriching of musts with permo-selective membranes), substituting a reverse osmosis membrane with a nanofiltration membrane is known only to reduce the operating pressure on the wine.

What the present inventor has done is to select a nanofiltration membrane with a particular aim of optimizing the passage in the permeate of the ions responsible for the tartrate instability (namely, tartrates, bitartrates and potassium ions). This choice of nanofiltration membrane has nothing to do with the combination of Smith and Brown and, as noted above, has nothing at all to do with applicant's discussion of prior methods of treating wine.

In fact, the present inventor has discovered that a nanofiltration membrane with a porosity of 100 to 300 Dalton (as disclosed in the specification as filed at page 5, lines 12-14 and original claim 15) is the best compromise between retaining the ionic substances responsible for tartaric instability and retaining in the retentate those substances which provide the organoleptic properties to the wine. This compromise is made with reference to the number of treatment

cycles to which the wine is subjected in order to achieve tartaric stability. In fact, in every cycle to which the wine is subjected, the wine is also subjected to a chock because of the concentration change of the substance in solution which negatively affect the wine's organoleptic properties.

Differently from Smith's method, the method of the present invention makes it possible to maintain the same alcoholic concentration of the original wine in the retentate and the permeate. Since the nanofiltration membranes used by Ferrarini do not retain alcohol. In this way, the possibility of undesirable and damaging colloidal phenomena deriving from an increase of ethanol concentration in the retentate is therefore avoided.

It should also be noted that the anionic resin used in the present invention is one which selectively removes from the permeate only tartrate and bitartrate ions, and not those substances that give organoleptic properties to the wine, such as succinic and lactic acids.

In view of the above, it is respectfully submitted that the claims are now in condition for allowance, and favorable action thereon is earnestly solicited.

Respectfully submitted,

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